

## Title Page

### Title:

Educational interventions: Equipping General Practice for youth mental health and substance abuse.  
A discussion paper

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### Abstract

#### Background

Youth mental health issues and substance abuse are important causes of morbidity and mortality in Ireland. General practice is a frequent point of contact for young people, however, reluctance amongst this population group to disclose mental health issues and a lack of confidence among GPs in dealing with them has been reported. Focussed training interventions with formal evaluation of their acceptability and effectiveness in achieving learning, behavioural change and impact on clinical practice are needed.

#### Aims

This paper aims to examine the literature on general practice in youth mental health, specifically, factors for an educational intervention for those working with young people in the community.

#### Methods

This review paper was carried out by an online search of PubMed on the recent literature on mental health and on educational interventions for health care workers in primary care.

#### Results

A number of papers describing educational interventions for GPs and primary care workers were found and analysed. Key areas to be addressed when identifying and treating mental health problems were: prevention, assessment, treatment, interaction with other services and ongoing support. Important elements of an educational intervention were identified.

## Discussion

Several barriers exist that prevent the identification and treatment of these problems in primary care. An educational intervention should help GPs address these issues. Any intervention should be rigorously evaluated.

## Conclusion

With the shift in services to the community in Irish health policy, the GP, with appropriate training could take the lead in early intervention in youth mental health and addiction.

## Keywords

General Practice

Youth mental health

Youth substance abuse

Barriers to presentation

Enabling strategies

Educational interventions

## **Background**

### **Importance of youth mental health**

Unintentional injury, suicide, and homicide are the top three causes of death in adolescence worldwide [1]. Ireland has the fourth highest rate of youth suicide in Europe and higher than ever rates of self-harm in young people, with almost 277,000 young people experiencing depressive symptoms[2]. Recent statistics from the National Registry of Deliberate Self Harm show a sharp rise in attempted hanging in the 15-29 years age group between 2010 and 2011[3]. Research shows that adolescent mental health problems are common in Ireland[4], accounting for 21-27% of morbidity in that age-group[5]. Depression, anxiety and emotional stress are the most common mental health problems that affect young people[4]. Furthermore, a strong association exists between mental health problems and excessive alcohol consumption. Irish and international studies have shown that mental health problems frequently co-exist with drug and alcohol problems, with problems in one domain perpetuating those in the other[6, 7]. Mental health problems also negatively affect educational outcomes and sexual health[8].

Despite most mental health problems developing between the ages of twelve and twenty-four, many are not detected until later in life [8, 9]. Irish College of General Practitioners guidelines published in 2014, aimed to provide GPs with guidance on diagnosing and managing mental health problems in adolescence and children, stress the importance of early diagnosis and timely appropriate treatment interventions, as delays in treatment can adversely impact treatment response and outcome[2]. The importance of early intervention in this age group, which is more efficient and cost-effective, is also reflected in international guidelines[10, 11].

### **Context- General Practice and Young People**

General practice is a frequent point of contact for young people with the health services. One study found that, for young adults, the average number of consultations per year was 3.9[5]. Although 32-38% of young adults have mental health disorders, only 2-12% present with a mental health complaint[12]. The ICGP guidelines refer to the tendency of young people to attend with physical presentations[2]. It is true that although mental health disorders are common in young people, only a minority are diagnosed and actively treated[13, 14].

### **Barriers to help-seeking**

One-third of children and young adults referred to mental health specialists do not make contact with primary care[15]. A complex set of barriers prevent a young person with a mental health complaint from presenting to their GP. Patient-orientated barriers include the issue of confidentiality and young people from socially deprived backgrounds are far more likely to develop mental health problems[16]. It is this group, however, who are least likely to get adequate access to their GPs[17]. GPs are concerned about medicalising what appear to be normal reactions and thus may not treat emerging mental health disorders[18]. Most importantly, from the educational planning perspective, there is a perception that GPs may lack the training in mental health, a fear that GPs will be dismissive of their concerns and a view that GPs will prescribe medication rather than talking things through[19].

### **Educational interventions for General Practice**

Several international studies have sought to address the obvious reluctance of young people to present to their GP with mental health problems, and the lack of confidence among GPs in dealing with such presentations when they arise. Kieling states that “action is imperative to reduce the burden of mental health problems in future generations”[20]. Embedding and expanding effective innovations in youth mental health services has been identified as an area in critical need of policy focus[21]. Irish researchers have identified key areas to be addressed in identifying and treating

mental health problems among young people in primary care[22]. Patel et al state that “general practitioners and other primary care workers need to be educated to better engage young people, to recognise mental and substance use disorders, and to deliver simple treatments”[8]. Availability of and access to high quality training in this area is much more likely to affect the services provided by GPs and primary care teams.

### **Evaluation of educational interventions**

Evidence-based treatments are often underutilised in community settings, due to lack of both empirically informed and supported training strategies and follow-up workshops[23]. Evaluation of educational programmes for GPs is thus necessary so that they may be developed and implemented for the benefit of patients. Kirkpatrick’s ‘Four Level Evaluation Model’ is one of the best known methodologies for assessing educational interventions[24]. An evaluation methodology such as this should be used when considering the outcome of educational interventions. There is a paucity of information in the literature regarding the implementation and evaluation of educational interventions for general practitioners and other primary health care workers in the area of youth mental health.

This paper aims to examine the role of educational interventions for general practice in addressing youth mental health in Ireland. Specifically, factors that should be considered for an appropriate educational intervention for health care workers in primary care will be identified.

### **Methods**

In preparation for a multidisciplinary youth mental health course aimed at primary health care workers, which took place at the University of Limerick Graduate Entry Medical School, the authors (AOR, ES, WC) performed a comprehensive literature search. Papers outlining prior educational interventions, core learning outcomes, teaching modalities and key topics in the area were collected and read. A lack of thorough evaluation of previous interventions was identified. This gap in the literature generated the themes for this review.

A focussed review of the literature was carried out on the online databases PubMed and ScienceDirect using combinations of the search terms ‘Youth mental health’ AND ‘Substance Abuse’ AND ‘General Practice’ AND ‘primary care’ AND ‘Educational Interventions’ AND ‘evaluation’. The abstracts were read to ensure relevance and the bibliographies were checked for other papers. Furthermore, websites of stakeholder organisations were checked for guidelines, including the Irish

College of General Practitioners (ICGP), National Institute for Clinical Excellence (NICE) and Headstrong ([www.headstrong.ie](http://www.headstrong.ie)).

Papers identified were evaluated using Kirkpatrick's Four Level Evaluation Model[24], *table 1*. This is one of the most widely used evaluations of training programmes worldwide. Each study was assessed to determine if it complied with the four levels necessary for a successful educational intervention. The four levels are: 1) reaction- the acceptability of the training to the participants; 2) learning- the knowledge, skills or attitudes acquired by the participants; 3) behaviour- the application of learning in practice; 4) Results- the effect on patients.

### **Results: National and International educational interventions**

Five studies were identified from the literature. Table 2 summarises the evaluation of each intervention using Kirkpatrick's levels.

#### *Sanci et al*

An Australian randomised controlled trial led by Sanci investigated the efficacy of an evidence-based, multi-faceted educational intervention for GPs on the principles of adolescent health care. It involved 108 GPs taking part in weekly educational sessions over six weeks with a two hour follow-up session six weeks later. A significant improvement in knowledge, skills and self-perceived efficacy was achieved[25] compared to a control group, and a follow-up study showed that the improvements were sustained after five years[26].

#### *Kramer et al*

The Therapeutic Identification of Depression in Young People (TIDY) was a UK-based intervention aimed at improving knowledge and attitudes of primary care professionals dealing with young people aged 13-17 years[27]. It used a technique that combined diagnosis of depression with a CBT-based intervention in a single primary care consultation. Training took place over two sessions and participants were evaluated from 16 weeks before to sixteen weeks after the intervention. Screening rates and subsequent rates of identification of depression increased[28]. Improvements in clinician self-reported confidence and knowledge were also noted. Semi-structured interviews conducted on 25 GPs and six nurse participants revealed improvements in understanding of symptoms and signs but a variable effect on attitudes and practices. Barriers to implementation cited were time constraints and fear of medicalisation of emotional symptoms[29].

*Asarnow et al*

A randomised controlled trial involving 418 patients in the United States between 1999 and 2003 evaluated an intervention for adolescent depression in primary care clinics[30]. The intervention involved training of primary care physicians with support from psychotherapists who worked with them during the six months of the intervention. Patients who received the intervention reported the following statistically significant findings: greater satisfaction with their mental health care, a greater uptake of services and use of counselling and fewer depressive symptoms. The paper concludes that such an intervention is feasible and acceptable to patients and could help professionals with the current crisis in youth mental health.

*Laraque et al*

The Children's Reach Initiative, involving 3 American states, recruited 137 primary care professionals to an educational intervention over eight sessions. The aim was to improve the diagnosis and management in the area of youth mental health. A multidisciplinary teaching panel used role play, interactive sessions and motivational technique to teach the skills. Survey of the participants at six months demonstrated an improvement in self-perceived knowledge and skills but no change in attitude and awareness[31].

## **Discussion**

### **Evaluation of interventions- what can be done?**

The studies found in the literature review are variable both in terms of type of educational intervention and in the rigor of their self-evaluation. All the studies appear to be feasible to their participants, i.e. primary health care workers. They all improved knowledge and skills to a varying degree. Attitude and behaviour was usually not affected or was not evaluated. The final component, in terms of Kirkpatrick's analysis, was result or effect on clinical practice, and tended not to be evaluated. An acceptable framework by which to evaluate these interventions would be of enormous benefit to the development of future or existing interventions. Kilmas et al evaluated the feasibility of an educational intervention for GPs in order to identify and manage problem alcohol use in drug users[32]. The paper outlines the development and process evaluation of the intervention and could serve as a framework for evaluating interventions in the area of youth mental health in primary care. International experts have called for the updating of evidence into clinical

practice[33]. Strategies to train professionals have lagged behind the development of the interventions themselves[34].

Most of the interventions allude to barriers to access and disclosure of mental health problems and substance abuse. A *youth-friendly* approach has been postulated as a means to overcoming this despite the paucity of evidence for the benefit of such strategies. Tylee, in a Lancet review of primary care in this area, writes that there is a need to assess the effect of primary care screening and intervention in youth mental health on health outcomes as well as engagement with and access to services[35]. Future research should evaluate the benefit of interventions beyond performance and consider the patient perspective, the fourth level in the Kirkpatrick model.

In 1999, the BMJ published guidelines on the criteria for writing a paper in the area of medical education[36]. They are a comprehensive guide to all aspects of the research and come under the following headings: overview, theoretical considerations, presentation and design and discussion. In fact the intervention by Sanci et al was evaluated using these guidelines and met most of the criteria[37]. Future developments in the area of youth mental health in the community would be strengthened by adhering to such a framework.

### **Role of the GP**

McGorry et al have suggested the 'system is weakest where it needs to be strongest'[38]. Young peoples' access to mental health is the poorest across all age groups. Recent developments have taken place in Ireland and abroad. *Headspace* is the Australian government primary care model for youth mental health. It has been described as a 'one-stop-shop' that is closely aligned to schools, community and specialist organisations[39]. The clinics offer GP and psychotherapy services but young people may attend these clinics with physical problems because the stigma of mental health continues to be a barrier in some cases. It has proven to be popular and trusted by young people. In Ireland, *Headstrong*, the National Centre for Youth Mental Health has grown out of the desire for change in mental health service delivery. It has developed *Jigsaw*, a community-based initiative that involves young people at all stages, from design to evaluation. The primary aim is to de-stigmatise mental health by reframing the role of services. Five regional centres improve access, promote awareness and interface with mental health services. *Youthspace* in Birmingham is a similar UK-based service.

Current mental health policy in Ireland is aiming towards a primary care model of treatment, as outlined in a Vision for Change[40]. This, combined with a lack of referral options and the stigma

associated with mental health services[5], means that general practice is likely to have an increasingly important role for youth with mental health issues. Indeed, a qualitative study of 37 primary care professionals in Ireland found that primary care is an important setting for evidence-based interventions in youth mental health and identified the following as key areas: interagency collaboration, strategies to increase awareness of mental health issues including youth friendly practices and ongoing engagement with such strategies[41]. Protected time, supports and adequate supervision have been recommended as enablers to GPs helping young people with mental health problems[42].

The continuity of care and frequency of contact between young adults and their GPs are strengths of general practice that could create the opportunity for GPs to play a central role in detection of and early intervention in youth mental health. A range of barriers exist that prevent important mental health issues being identified and treated. Therefore, recognising and addressing such barriers, as well as educating GPs to perform brief assessment and management techniques, would form the basis of any educational intervention for GPs. With appropriate training, GPs could take the lead in early intervention in youth mental health and addiction in conjunction with other agencies.

*Table 1.* Kirkpatrick's Four Levels for Evaluation of Training, adapted from Kirkpatrick et al, 1976

Reaction	How training participants react to intervention
Learning	Effect on knowledge skills and attitudes
Behaviour	Extent to which behaviour has changed
Results	Final results

*Table 2.* Assessment of educational interventions using Kirkpatrick's levels

Kirkpatrick's levels	Reaction	Learning	Behaviour	Results
Sanci et al	Feasible	Yes, statistically significant, Maintained after 5 years	Yes, limited effect	Further studies needed to see full clinical impact
Kramer et al	Feasible	Yes, improved detection of mental illness	Variable	Further studies needed to see full clinical impact
Asarnow et al	Feasible	Yes	Not evaluated	Improved access to therapies. Full



				impact not studied.
Laraque et al	Feasible	Yes	No change	Further studies needed to evaluate

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